

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Small Entity)**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
07009.011003

Total Pages in this Submission

U.S. PTC  
10/670812  
222212

092503

**TO THE COMMISSIONER FOR PATENTS**

Mail Stop Patent Application

P.O. Box 1450

Alexandria, VA 22313-1450

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**BONDING OF A MULTI-LAYER CIRCUIT TO A HEAT SINK**

and invented by:

**James FRAIVILLIG**

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

Continuation    Divisional    Continuation-in-part (CIP)   of prior application No.: 10/044,604

Which is a:

Continuation    Divisional    Continuation-in-part (CIP)   of prior application No.: 09/225,272

Which is a:

Continuation    Divisional    Continuation-in-part (CIP)   of prior application No.: \_\_\_\_\_

Enclosed are:

**Application Elements**

1.  Filing fee as calculated and transmitted as described below
2.  Specification having 23 pages and including the following:
  - a.  Descriptive Title of the Invention
  - b.  Cross References to Related Applications (*if applicable*)
  - c.  Statement Regarding Federally-sponsored Research/Development (*if applicable*)
  - d.  Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
  - e.  Background of the Invention
  - f.  Brief Summary of the Invention
  - g.  Brief Description of the Drawings (*if filed*)
  - h.  Detailed Description
  - i.  Claim(s) as Classified Below
  - j.  Abstract of the Disclosure

**22511**

PATENT TRADEMARK OFFICE

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**Application Elements (Continued)**

3.  Drawing(s) (*when necessary as prescribed by 35 USC 113*)  
a.  Formal Number of Sheets \_\_\_\_\_ 5  
b.  Informal Number of Sheets \_\_\_\_\_
4.  Oath or Declaration  
a.  Newly executed (*original or copy*)  Unexecuted  
b.  Copy from a prior application (37 CFR 1.63(d)) (*for continuation/divisional application only*)  
c.  With Power of Attorney  Without Power of Attorney  
d.  DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5.  Incorporation By Reference (*usable if Box 4b is checked*)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under  
Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby  
incorporated by reference therein.
6.  CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7.  Application Data Sheet (See 37 CFR 1.76)
8.  Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all must be included*)  
a.  Computer Readable Form (CFR)  
b.  Specification Sequence Listing on:  
i.  CD-ROM or CD-R (2 copies); or  
ii.  Paper  
c.  Statement(s) Verifying Identical Paper and Computer Readable Copy

**Accompanying Application Parts**

9.  Assignment Papers (cover sheet & document(s))
10.  37 CFR 3.73(B) Statement (when there is an assignee)
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15.  Certified Copy of Priority Document(s) (if foreign priority is claimed)
16.  Certificate of Mailing  
 First Class  Express Mail (*Specify Label No.*): EL 960595045 US

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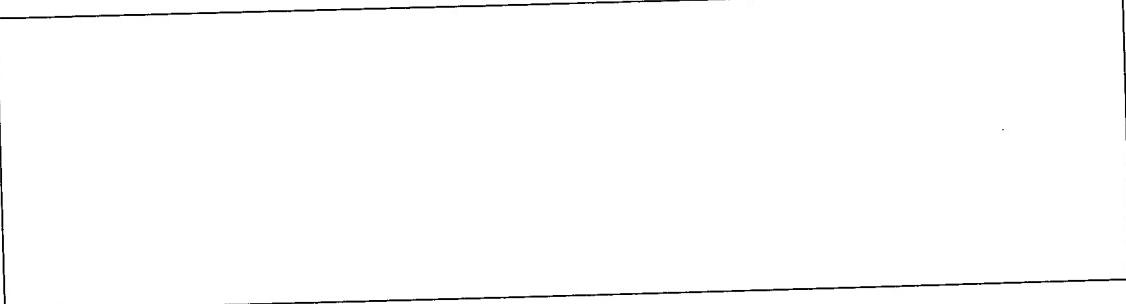
*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

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**Accompanying Application Parts (Continued)**

17.  Applicant claims small entity status. See 37 CFR 1.27.  
 (Optional) Small Entity Statement(s) - Specify Number of Statements Submitted: \_\_\_\_\_

18.  Additional Enclosures (*please identify below*):  


**Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)**

19.  Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

***Warning***

*An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.*

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04742 U.S. PTO  
 09/25/03

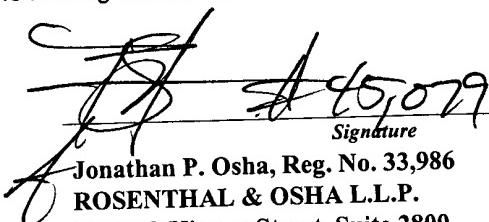
**Fee Calculation and Transmittal**

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	24	- 20 =	4	x \$9.00	\$36.00
Indep. Claims	3	- 3 =	0	x \$42.00	\$0.00
Multiple Dependent Claims (check if applicable)	<input type="checkbox"/>				\$0.00
				<b>BASIC FEE</b>	<b>\$375.00</b>
OTHER FEE (specify purpose)					\$0.00
				<b>TOTAL FILING FEE</b>	<b>\$411.00</b>

- A check in the amount of \$411.00 to cover the filing fee is enclosed.
- The Director is hereby authorized to charge and credit Deposit Account No. 50-0591 as described below.
- Charge the amount of \_\_\_\_\_ as filing fee.
- Credit any overpayment.
- Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: 9/24/03



Signature  
 Jonathan P. Osha, Reg. No. 33,986  
 ROSENTHAL & OSHA L.L.P.  
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cc:

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): James FRAIVILLIG			Docket No. 07009.011003
Serial No.	Filing Date [Herewith]	Examiner	Group Art Unit

**Invention:**

**BONDING OF A MULTI-LAYER CIRCUIT TO A HEAT SINK**

I hereby certify that this Utility Patent Application  
*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 CFR 1.10 in an envelope addressed to:

Mail Stop: Patent Application  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

on Sept. 25, 2003.  
*(Date)*

Lisa H. Smith  
*(Typed or Printed Name of Person Mailing Correspondence)*

  
*(Signature of Person Mailing Correspondence)*

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**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**  
**Applicant(s): James FRAIVILLIG**

**Docket No.**

07009.011003

<b>Serial No.</b>	<b>Filing Date</b> [Herewith]	<b>Examiner</b>	<b>Group Art Unit</b>

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P.O. Box 1450  
Alexandria, VA 22313-1450

on Sept. 25 2003.  
(Date)

Lisa H. Smith  
(Typed or Printed Name of Person Mailing Correspondence)

  
(Signature of Person Mailing Correspondence)

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